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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,157	03/06/2002	Ronald M. Reano	RUN-101-C	9397

7590 01/21/2004

ATTN: Thomas D. Helmholdt
YOUNG & BASILE, P.C.
SUITE 624
3001 WEST BIG BEAVER ROAD
TROY, MI 48084-3107

EXAMINER	
KOBERT, RUSSELL MARC	
ART UNIT	**PAPER NUMBER**
2829	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/092,157	REANO ET AL.	
	Examiner	Art Unit	
	Russell M Kobert	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *1-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1. Applicant's election with traverse of Invention III, claims 19-30, in the Election filed October 15, 2003 is acknowledged. The traversal is on the ground(s) that the inventions are not shown to be distinct from one another as evidenced by the identical classification in Class 324, Subclass 96 for each of the groups of claims. This is not found persuasive because Applicants have not shown that the groups are not patentably distinct. Admission on the record by Applicants that the groups are not patentably distinct will result in rejoinder. Applicants appear to be arguing that same subclass of classification means same invention. If such were carried to its logical conclusion there could only be one patent per subclass and Applicants could be denied a patent on the basis that there is already at least one patent in Class 324, Subclass 96. With regard to the "no burden" argument, it is noted that each distinct invention beyond one is a burden in that it draws the attention of the Examiner to its own requirements. Examination requires focus to follow search leads and patterns of logic in formulating applications of the prior art to that which is claimed. When the Examiner has to pursue several search patterns of logic simultaneously or serially, added burden is presented. In order to examine several inventions and/or species simultaneously or serially, added effort beyond that necessary for one invention or species must be expended. Where the effort is serial and the jobs are different the added burden is obvious. Digging two equal holes of the same size requires twice the effort of digging one hole. Such is an obvious conclusion. It can be argued that some inventions or species can be examined simultaneously but such is true only if they are not patentably distinct, that is, if that which applies to any one applies to all others. Where inventions or species are

patentably distinct each requires separate consideration. As a for instance, consider a properly restrictable apparatus and method of use of that apparatus where one has details without correspondence in the other. Finding references anticipating or making obvious one does not necessarily render the other unpatentable. Having to examine the other constitutes a burden. If the apparatus and method of the above example are not patentably distinct no burden is presented in examining both since if one falls the other falls as well. As a second for instance, consider a properly restrictable combination and subcombination where all the details of the subcombination are not necessary for the combination. Finding references anticipating or making obvious one does not necessarily render the other unpatentable. Having to examine the other is a burden. If the combination and subcombination of the above example are not patentably distinct no burden is presented in examining both since if one falls the other falls as well. Admission on the record that the groups are not patentably distinct will result in rejoinder.

With regard to Applicants' misunderstanding to the reasoning that the "sub-combination has separate utility, such as determining electric field information that is dependent on temperature variations," with respect to combination – subcombination relationship between Inventions III and I respectfully, it is further noted that the subcombination compensates for temperature variations using bandgap modulation means wherein the bandgap modulation exhibits a relationship that is a function of temperature, mathematically speaking, to compensate for temperature variations. The combination does not require such a relationship.

With regard to Applicants' argument that the relationship between Invention I and Invention II is improper, it is noted that no combination – subcombination relationship was so indicated to that set of inventions. Rather, the relationship of combination to subcombination was indicated as **Inventions I and III** in a ***first set*** and **Invention II** in a ***second set*** respectfully.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the Election filed October 15, 2003.

3. In Paragraph [0002], line 2, reference is made to U.S. Application Serial No. 09/877,936. The current status of that application must be indicated in the specification. In this instance, U.S. Application Serial No. 09/877,936 is now pending. It is further noted that U.S. Application Serial No. 09/877,936 is scheduled to Issue as U.S. Patent No. 6,677,769 on January 13, 2004.

4. Applicant's arguments with respect to claims 19-30 have been considered but are moot in view of the new ground(s) of rejection.

5. Claims 20-23 and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what information is *related to* the electric field as mentioned in claim 20. Moreover, it is not clear how this information is *based on* another portion of the output optical signal as mentioned in claim 20.

It is not clear what the *association* is between an attenuation of a portion of the output optical signal and compensating for temperature variations as mentioned in claim 21. Moreover, it is not clear how to exclude electric field information from the output optical signal during the process used in the deriving means as mentioned in claim 21.

It is not clear how the deriving means compensates for temperature variations *based on* bandgap modulation of the output optical signal as mentioned in claim 22.

It is not clear what the *association* is between bandgap modulation and the opto-electronic technique used in the deriving means of claim 29.

It is not clear how to relate to a combination of electric field and temperature information as mentioned in claim 30. Moreover, it is not clear what the relationship is between a measured quantity corresponding to absorption of one other specific portion of the output optical signal to either the electric field, temperature information or combination of both the electric field and temperature information. Additionally, claim 30, as written, fails to convey a clear understanding of Applicants' invention.

Terms such as "related to," "association" and "based on" present indefinite limitation(s) to the claimed invention.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 19 and 24-28 are rejected under 35 U.S.C. 102(b) as being anticpated by Zhang et al (5952818).

Zhang et al anticipates (Figure 15) an electro-thermal field mapping apparatus for scanning a workpiece (104) comprising:

means for generating an optical signal (Laser Beam);

an electro-optic field-mapping sensor (indicated as item 100 in Figure 15 however referred to as item 106 in specification at column 12, line 19) for receiving the generated optical signal and for generating an output optical signal influenced by an electric field associated with the workpiece passing through the sensor (col 12, ln 11-31);

means for sensing a characteristic of the output optical signal containing electric field magnitude and phase information (col 12, ln 32-61); and

means for deriving the sensed characteristic independent of temperature variations (col 11, ln 36-46; using ZnTe crystal); as recited in claim 19.

The limitations of claims 24-28 are considered inherent in the apparatus of Zhang et al or are within the normal range of operating the apparatus of Zhang et al. Moreover, the limitations of claims 24-28 do not further limit the apparatus as claimed.

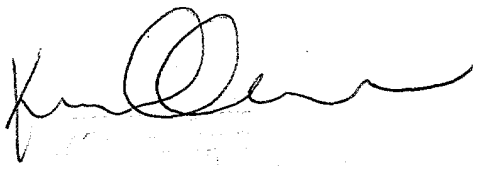
8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (703) 308-5222. *Starting January 12, 2004, the new telephone number will be (571) 272-1963.*

The Examiner's Supervisor, Kammie Cuneo, can be reached at (703) 308-1233. *Starting January 12, 2004, the new telephone number will be (571) 272-1957.*

For an automated menu of Tech Center 2800 phone numbers call (571) 272-2800.



Russell M. Kobert
Patent Examiner
Group Art Unit 2829
January 6, 2004